

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number  
**WO 2005/092521 A3**(51) International Patent Classification:  
**B05D 7/24** (2006.01)(21) International Application Number:  
PCT/DK2005/000206

(22) International Filing Date: 23 March 2005 (23.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PA 2004 00491 26 March 2004 (26.03.2004) DK  
60/556,482 26 March 2004 (26.03.2004) US(71) Applicants (for all designated States except US):  
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

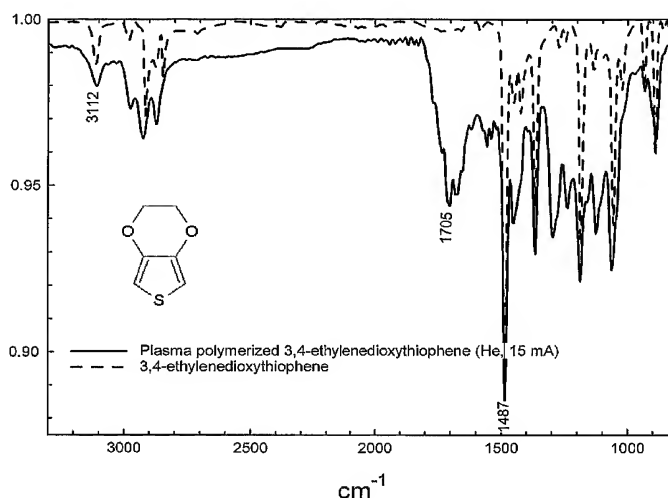
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: PLASMA-POLYMERISATION OF POLYCYCLIC COMPOUNDS



(57) **Abstract:** The present invention relates to a method for the preparation of a layer of a plasma-polymerised material on the surface of a substrate, e.g. a substrate of a glass, an organosiloxane-based or polysiloxane-based material, silicon, fluoro-polymer (e.g. Teflon®), etc. The present invention also relates to novel objects and microstructured or micropatterned devices, e.g. by lift-off techniques, in particular such objects and devices that have layers of electrically conducting materials providing a conductivity of at least 0.01 S/cm. A feature of the invention is the plasma-polymerization of a compound including at least one polycyclic compound, said polycyclic compounds) comprising a non-aromatic heterocyclic ring fused to an aromatic or heteroaromatic ring or ring system. Examples of such compounds are 3,4-ethylenedioxythiophene (EDT), forming layers of poly(ethylenedioxythiophene) (PEDT), and piperonylamine, piperonyl chloride, safrole, 3,4-ethylenedioxy-pyrrole, 3,4-ethylenedioxy-N-methylpyrrole, and 3,4-methylenedioxythiophene.



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**(88) Date of publication of the international search report:**

2 March 2006

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*